

Speak Up for Conservation

t is my sincere hope that by the time you receive this magazine spring will have arrived in Missouri. I look forward to hearing turkeys gobble, taking my first crappie fishing and mushroom hunting trips of the season,

and witnessing redbud and dogwood trees bloom in the woods. Missouri has special forest, fish, and wildlife resources due to the firm commitment of citizens who desire to protect those treasures.

One of the great privileges of serving Missourians as a deputy director in the Conservation Department is hearing from citizens who write, call, or email from across our great state. It is through that input, and a science-based management approach, that we ensure the sustainability of resources and provide a multitude of diverse recreational opportunities for all Missourians, now and in the future. As you might expect, views on how to accomplish natural resource management varies as much as a Missouri March wind.

When Missourians communicate with me, two characteristics are always evident in their comments: They are passionate about their forest, fish, and wildlife resources, and they are willing to point out where the Department has fallen short of their personal expectations. Two recent examples come to mind.

In 2013, the Conservation Commission made a regulation change to ensure sustainability of blue catfish on Truman Lake and Lake of the Ozarks. The Commission did so after gathering significant public input over a three-year period. Biological and social science data demonstrate that the regulation change will serve the majority of Missourians across a wide spectrum of interests; however, those changes, which were effective on March 1, have disappointed a few Missourians who do not agree with the Department's vision for blue catfish management on those impoundments. To best serve citizens and Missouri's forest, fish, and wildlife resources, the Department must continue to make decisions based on those tenants. History shows that this is a winning combination. A few years ago, modifications to regulations pertaining to crap-



pie and trout size limits resulted in healthy fisheries for both of those species. At the time, many citizens were skeptical of those changes; today Missouri offers improved crappie and trout fishing opportunities.

Missouri's white-tailed deer herd has significant cultural, social, biological, and economic value. The recent stabilization of deer numbers across Missouri, coupled with the 2012 drought and significant EHD and Blue Tongue outbreaks caused reductions in herd sizes in portions of the state. This has resulted in less than satisfactory experiences for some of Missouri's deer hunters. Passionate citizens and resource users have expressed their concerns about the status of the herd. That input will be considered when recommendations

for the 2014–2015 deer season are formulated. The Department will soon host a series of meetings "at the forks of the road" to engage citizens and gather information on future management approaches for Missouri's ever-important deer herd.

These two examples of Department and citizen interaction are why Missouri's forest, fish, and wildlife resources provide outdoor adventures that are second to none in this country. While many of the comments I receive are pointed and direct, that citizen passion bodes well for sustainability of those resources in the 21st century. I appreciate citizen candor and never take the frankness personally; on the contrary, I admire those individuals who are willing to weigh in, no matter how blunt.

We must all recognize that the pressures of a modern world will influence Missouri's resources. The Department of Conservation strives to understand the needs and desires of today's citizens and resource users, while ensuring sustainability of those resources both for today and for future Missourians.

FEATURES

IO Crappie: King of Spring

by Greg Stoner, photographs by Noppadol Paothong When the weather warms, anglers seek a royal treat in a mess of these fine-eating fish.

18 A Turkey for Jerry

by Don LaFerla, photographs by David Stonner Blind faith and the spring turkey season opener

22 Home Sweet Home

by David Stonner

Citizen conservationists prepare St. Louis' Forest Park for the return of purple martins

Cover: Wild turkey, by Noppadol Paothong. Missouri is recognized as offering some of the nation's best turkey hunting.

500mm lens • f/5.6 • 1/400 sec • ISO 400

DEPARTMENTS

- 2 Letters
- 4 Hunting and Fishing Calendar
- 4 Agent Notes
- 5 Ask the Ombudsman
- 6 News & Events
- 30 Plants & Animals
- 32 Places to Go
- 33 Discover Nature



Our photographers have been busy exploring the intricacies of the Missouri outdoors. See if you can guess this month's natural wonder. The answer is revealed on Page 8.



ALL-SEASON ANGLER

I thoroughly enjoyed your January article on ice fishing [Ice Fishing in Missouri; Page 10]. I was raised on a small dairy farm in the Kettle Moraine area of southeastern Wisconsin. Our farm had about a mile of frontage on a small lake. There wasn't much time for fishing during most of the year, but when that lake froze over, we were ready.

We had a spring in the woods that flowed into the lake and kept a small area ice-free. That's where my father seined for minnows for bait. He also was in charge of chopping the hole in the ice. My grandfather, older than 65, and my sister and I, under 16, did not need licenses, so we were the fishermen. There weren't any fishing shanties then, so everybody could socialize and share the excitement of a big catch.

The brilliant blue sky, the crisp clean air, and the view of sparkling snow-covered wooded hillsides are etched in my memory, as are the

wonderful fried perch dinners we would have when we got home. It may not be for everyone, but ice fishing is a wonderfully exhilarating and rewarding winter activity.

Dorothy K. Stade, Ferguson

WINTER WALK

This article [February; Page 18] really touched me as, at 87, I still find much pleasure in nature.

On my frequent drive from Howard in Elk County, Kan., to our ranch 10 miles west, I have developed quite an interest in the trees along the way. We here in Elk County are blessed with quite a variety of trees, shrubs, flowers, birds, and animals. Before reading the article, on one of my drives, I had thought that it would be rewarding to be able to photograph the trees in winter as their shapes are so distinct. As I drive along, it is like they are old friends. I noticed one small tree several years ago, when it had seed

pods. I didn't know what it was and took one of the pods with me to "coffee," thinking that one of the locals would be able to identify the tree. I received all sorts of answers, but didn't determine what it was until the pod, left in our truck, popped open, displaying the familiar buckeye. I have had several seeds sprout, but they never live for long. I have one remaining, which I am hoping lives through the winter.

I have enjoyed your publication for many years, since becoming acquainted with it when visiting a niece living in Missouri.

Lula Mae Harrison, via Internet

RAPTOR RAPTURE

Danny Brown's prose captured the essence of the harrier on equal footing with his fabulous photograph [February; Page 30]. In tandem they transported me to the scene. The Missouri Conservationist is a monthly treasure.

Briane Lawer, Kansas City, Mo.

BEST OF THE BUNCH

For many years, I have read the Missouri Conservationist magazine and really liked it. In fact, it is from this magazine that I have developed a great love for nature. So, in return, I have decided to choose my favorite article in this month's magazine.

When I was deciding on which article I would compliment, I had a rough time because all the articles were so good. However, I finally decided on Missouri Trout Fishing: It's Easy to Get Hooked for various reasons: 1. It talked about one of my best interests: fishing; 2. It gave me tips on what supplies I should buy, what techniques I should use, and where I should go for fishing; 3. It taught me about conservation and fish, and it made me feel good knowing that fish are being saved by the Missouri Department of Conservation; 4. It gave me the urge to go fishing again. (Since it's winter I feel that it's not necessary to go fishing.)

Those are the reasons I chose your article to be the best article in this month's Missouri Conservationist magazine (although all of them deserve compliments). I hope that you will continue to use the techniques that you used in this month's article, and that you will write more articles. Many more.

Branden May, 6th grader, via Internet



Reader Photo

A SWEET TREAT

Thirteen-year-old Andrew Sweet, of Springfield, took this photo of an eastern garter snake at the Springfield Conservation Nature Center. "I was with my three older brothers and my grandpa when this little guy poked his head up beside the trail," says Sweet. "He didn't seem frightened, and I was able to take several photographs of him." Sweet says he loves taking pictures of nature and wildlife. "I take my camera with me wherever I go," he says. Sweet says he takes a lot of his photos in his backyard, but he and his family also frequently visit the nature center. "I like walking the trails with my family and looking for wildlife to photograph," says Sweet. "Whenever we go to the nature center, we usually see only birds and deer while hiking on the trails, so this was a special treat."



DEPARTMENT HEADQUARTERS

Phone: 573-751-4115 Address: PO Box 180.

Jefferson City 65102-0180

REGIONAL OFFICES

Southeast/Cape Girardeau: 573-290-5730

Central/Columbia: 573-815-7900 Kansas City: 816-622-0900 Northeast/Kirksville: 660-785-2420 Southwest/Springfield: 417-895-6880 Northwest/St. Joseph: 816-271-3100

St. Louis: 636-441-4554

Ozark/West Plains: 417-256-7161

SUBSCRIPTIONS

Phone: 573-522-4115, ext. 3856 or 3249

Address: Circulation, PO Box 180, Jefferson City 65102-0180

E-mail: Subscriptions@mdc.mo.gov

Conservationist online services: Subscribe to the magazine, update your mailing address, or sign up to receive an e-mail when the latest issue is available

online at mdc.mo.gov/node/9087

Cost of subscriptions: Free to Missouri households

Out of State \$7 per year Out of Country \$10 per year

Please allow 6-8 weeks for delivery of your first issue.

OMBUDSMAN QUESTIONS

Phone: 573-522-4115, ext. 3848 Address: Ombudsman, PO Box 180, Jefferson City 65102-0180 E-mail: Ombudsman@mdc.mo.gov

EDITORIAL COMMENTS

Phone: 573-522-4115, ext. 3847 or 3245 Address: Magazine Editor, PO Box 180, Jefferson City 65102-0180 **E-mail:** *Magazine@mdc.mo.gov*

READER PHOTO SUBMISSIONS

Flickr: flickr.com/aroups/mdc-readerphotos-2014

E-mail: Readerphoto@mdc.mo.gov

Address: Missouri Conservationist, Reader Photo, PO Box 180, Jefferson City 65102-0180

MDC Online

Discover more about nature and the outdoors through these sites.

Blog: mdc.mo.gov/node/109 Facebook: facebook.com/MDConline Flickr: flickr.com/photos/mdc_online

Kids' site: XplorMo.org

Missouri Conservationist: mdc.mo.gov/node/83

Missouri Department of Conservation: mdc.mo.gov

Nature Shop: mdcnatureshop.com Twitter: twitter.com/MDC_Online twitter.com/Nature Videos YouTube: youtube.com/user/moconservation

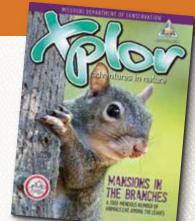
KIDS' MAGAZINE

Six times a year we'll bring you eye-popping art, photos, and stories about Missouri's coolest critters, niftiest natural places, liveliest outdoor activities, and people who've made a living in the wild. Come outside with us and XPLOR!

A Parents' Choice Approved Award Winner

Missouri residents: FREE (one subscription per household) Out of state: \$5 per year; Out of country: \$8 per year

A guardian's name and address is required with the subscription. Please allow 6-8 weeks for delivery of your first issue.



SIGN UP NOW! *xplormo.org* | 573-522-4115, ext. 3856 or 3249

Missouri. Lonservationist

GOVERNOR Jeremiah W. "Jay" Nixon

THE CONSERVATION COMMISSION

Don C. Bedell Iames T. Blair, IV Marilynn J. Bradford I. Kent Emison

Director Robert I. Ziehmer Deputy Director Thomas A. Draper Deputy Director Tim D. Ripperger General Counsel Jennifer Frazier Internal Auditor Lisa Wehmeyer

DIVISION CHIEFS

Administrative Services Carter Campbell Design and Development Jacob Careaga Fisheries Brian Canaday

Forestry Lisa G. Allen Human Resources Thomas Neuhauer Outreach & Education Mike Huffman Private Land Services Bill White Protection Larry D. Yamnitz Resource Science Mike Hubbard Wildlife Jennifer Battson Warren

CONSERVATIONIST STAFF

Designer Stephanie Thurber

Editor In Chief vacant Managing Editor Nichole LeClair Terrill Art Director Cliff White Staff Writer/Editor Brett Dufur Staff Writer lim Low Photographer Noppadol Paothong Photographer David Stonner

Circulation Laura Scheuler The Missouri Conservationist (ISSN 0026-6515) is the official monthly publication of the Missouri Department of Conservation, 2901 West Truman Boulevard, Jefferson City, MO (Mailing address: PO Box 180, Jefferson City, MO 65102.) Subscription free to adult Missouri residents; out

of state \$7 per year; out of country \$10 per year. Notification of address change must include both old and new address (send mailing label with the subscriber number on it) with 60-day notice. Preferred periodical postage paid at Jefferson City, Mo., and at additional entry offices. Postmaster: Send correspondence to Circulation, PO Box 180, Jefferson City, MO 65102-0180. Phone: 573-522-4115, ext. 3856 or 3249. Copyright © 2014 by the Conservation Commission of the State of Missouri.

Equal opportunity to participate in and benefit from programs of the Missouri Department of Conservation is available to all individuals without regard to their race, color, national origin, sex, age, or disability. Questions should be directed to the Department of Conservation, PO Box 180, Jefferson City, MO 65102, 573-751-4115 (voice) or 800-735-2966 (TTY), or to the U.S. Fish and Wildlife Service Division of Federal Assistance, 4401 N. Fairfax Drive, Mail Stop: MBSP-4020, Arlington, VA 22203

Printed with soy ink





"Lester doesn't care about food scraps. He hauls off stuff to sell on eBay."

gent Notes

Take a Youth Hunting This Spring

LONG BEFORE I ever harvested my first turkey, I can remember going turkey hunting with my dad. The things he taught me about hunting and fishing



fostered my lifelong passion for the outdoors, which ultimately influenced my desire to become a conservation agent. My dad took time out of his busy schedule to be a mentor and to teach me the outdoor skills that I now pass down to my children, who will one day do the same.

Spring is an excellent time to mentor someone in the outdoors. Youth turkey season is April 12–13 for hunters age 6-15, and the limit is one male turkey, or turkey with a visible beard. To give youth hunters more opportunity to participate in the youth season, shooting hours are from one half-hour before sunrise to sunset. All youth hunters must have a permit, which are half-price for youth. All youth hunters who are not hunter education certified must hunt in the immediate presence of a properly licensed adult hunter age 18 and older, who is hunter education certified, or was born before Jan. 1, 1967.

The regular spring turkey season is April 21-May 11. Youth who harvest a turkey during the youth season must wait until the second week of the regular season to attempt to harvest a second bird. More information can be found in the 2014 Spring Turkey Hunting Regulations and Information brochure, or online at *mdc.mo.gov/node/72*. Missouri is a great place to hunt wild turkeys. Take time out of your busy schedule to take a youth hunting this spring, the experience could last a lifetime.

Kevin Eulinger is the conservation agent in Lincoln County. If you would like to contact the agent for your county, phone your regional conservation office listed on Page 3.

HUNTING AND FISHING CALENDAR

FISHING	OPEN	CLOSE	
Black Bass from Ozark Streams	05/24/14	02/28/15	
Nongame Fish Snagging	03/15/14	05/15/14	
Paddlefish	03/15/14	04/30/14	
Paddlefish on the Mississippi River	03/15/14	05/15/14	
	09/15/14	12/15/14	
Trout Parks	03/01/14	10/31/14	
HUNTING	OPEN	CLOSE	
Coyote	05/06/13	03/31/14	
Deer			
Archery	09/15/14	11/14/14	
	11/26/14	01/15/15	
Firearms			
Urban Portion	10/10/14	10/13/14	
Early Youth Portion	11/01/14	11/02/14	
November Portion	11/15/14	11/25/14	
Antlerless Portion (open areas only)	11/26/14	12/07/14	
Alternative Methods Portion	12/20/14	12/30/14	
Late Youth Portion	01/03/15	01/04/15	
Groundhog (woodchuck)	05/12/14	12/15/14	
Pheasant			
Youth	10/25/14	10/26/14	
North Zone	11/01/14	01/15/15	
Southeast Zone	12/01/14	12/12/14	
Quail			
Youth	10/25/14	10/26/14	
Regular	11/01/14	01/15/15	
Rabbit	10/01/14	02/15/15	
Squirrels	05/24/14	02/15/15	
Turkey			
Archery	09/15/14	11/14/14	
	11/26/14	01/15/15	
Firearms			
Youth	04/12/14	04/13/14	
Spring	04/21/14	05/11/14	
Fall	10/01/14	10/31/14	
	please see the <i>Waterfowl Hunting Digest</i> or see mdc.mo.gov/node/3830		
TD A DDING	ODEN	CLOSE	

TRAPPING	OPEN	CLOSE
Beaver and Nutria	11/15/13	03/31/14

For complete information about seasons, limits, methods, and restrictions, consult the Wildlife Code and the current summaries of Missouri Hunting and Trapping Regulations and Missouri Fishing Regulations, The Spring Turkey Hunting Regulations and Information, the Fall Deer and Turkey Hunting Regulations and Information, the Waterfowl Hunting Digest, and the Migratory Bird Hunting Digest. For more information visit mdc.mo.gov/node/130 or permit vendors.

ASK Ombudsman





Q. When we moved to our farm there were lots of blue-tailed lizards. Now, nine years later, we don't see them very often. Is there a way to bring them back?

Your blue-tailed lizards were probably hatchling or immature five-lined skinks. It is likely that the young ones that you saw grew into adults, which do not have the blue tail coloration. Five-lined skinks prefer open woods, near wooded bluffs and rocky, south-facing hillsides. They require shelter in the form of rocks, downed logs, stumps, and standing dead trees. They will also live around farm buildings, rock gardens, and patios. The better the local habitat, the more of them you will have, including the young ones with the blue tails. For more information from our online field guide, visit mdc.mo.gov/node/6689.

Q. Although bearded hen turkeys are legal to harvest during the spring turkey season, we've

always avoided taking them, preferring to keep them around for turkey reproduction. Are we correct in thinking that bearded hens are able to lay eggs and produce young birds?

Yes, bearded hens are able to reproduce like other hen turkeys. You should be increasing your chances of having a larger local turkey population by sparing the bearded hens. It is estimated that about 5-10 percent of hens have beards. The reason that they may be legally taken during the spring season is because it can be difficult to tell a bearded hen from a gobbler.

Q. I have been seeing fewer deer in recent years, and they were particularly scarce this

past deer season. What is the Department's plan to increase the size of the herd?

Deer density is not evenly distributed across the state. Factors contributing to local deer numbers include hunting pressure, food supply, and frequency and severity of disease outbreaks. The increased opportunities for antlerless harvest in recent years and the unanticipated outbreak of hemorrhagic diseases in 2012 and 2013 have contributed to reduced deer numbers in many areas. Last season the availability of firearms antlerless permits was reduced in all or parts of 12 counties. Our deer biologists and other staff are now reviewing last season's harvest numbers, input from hunter and production landowner surveys, bow hunter observation surveys, other population size estimates, and public comments to determine if additional regulations changes are warranted. The 2014 Fall Deer and Turkey Hunting Regulations and Information booklet will be available by July 1 and will highlight any changes since last year.



Ombudsman Tim Smith will respond to your questions, suggestions, or complaints concerning the Conservation Department. Address: PO Box 180, Jefferson City, 65102-0180 Phone: 573-522-4115, ext. 3848 Email: Ombudsman@mdc.mo.gov



Dogwood Splendor Coming

Want to take a drive to enjoy the annual spectacle of Missouri's flowering trees? Try one of these routes.

Highway 19 between Montgomery
City and Thayer
Highway 5 between Versailles
and Gainesville
Highway 142 between Doniphan
and Bakersfield
Highway 72 between Cape
Girardeau and Rolla
Highway 63 between Kingdom
City and Thayer
I-44 between Eureka and Rolla
Highway 50 between Eureka

and Jefferson City **Highway 60** between Poplar

Bluff and Springfield

Redbud trees blossom first, sending out rosepurple clusters as soon as late March. Dogwood blossoming normally peaks in mid-April near the Arkansas border and two to three weeks later in northern counties.

Bequest to Benefit Conservation Projects

A cash donation of \$43,000 from the estate of Harry H. Thurm to the Conservation Department will be used for conservation projects. Thurm was born and raised in Wittenberg, Mo., a community on the Mississippi River in Perry County. He served in the U.S. Army during World War II. He was co-owner of a jewelry store in St. Louis for many years. Thurm retired to Lake Wappapello in southeast Missouri, later moved to upstate New York on Lake Champlain, and then to Weybridge, Vt., where he lived at the time of his death. His friends described him as a gentle and kind man who counted fishing and chip carving among his several hobbies. "It is my understanding that Mr. Thurm really enjoyed fishing at Lake Wappapello," said Conservation Department Deputy Director Tim Ripperger. "His generosity will help with conservation projects that will serve to enhance Missouri's forest, fish, and wildlife resources."

Gov. Nixon Appoints J. Kent Emison to Conservation Commission

Governor Jeremiah W. "Jay" Nixon has appointed J. Kent Emison, D-Higginsville, to serve on the Missouri Conservation Commission.

Emison is a partner at the Lexington law firm of Langdon & Emison. Raised on a dairy farm in Lafayette County, he and his wife own 80 acres in Lafayette County, 20 of which are devoted to quail habitat. He has been a member of the Higginsville Park Board for more than 25 years.

Emison earned his undergraduate degree from the University of Missouri and his law degree from the University of Missouri-Kansas City. Gov. Nixon has appointed Emison for a term ending June 30, 2019.

The Conservation Commission controls, manages, restores, conserves, and regulates the bird, fish, game, forestry, and all-wildlife resources of the state, including hatcheries, sanctuaries, refuges, reservations, and all other property owned, acquired, or used for such purposes, as well as the acquisition and establishment of those properties.

Fishing Instructors Needed

Fishing is a great way for kids and families to have fun outdoors, discover nature, and make happy memories together. For more than a million anglers, conservation makes Missouri a great place to fish.





CONSERVATION COMMISSION ACTIONS

The March Commission meeting featured presentations and discussions regarding the cold-water hatchery system, Shepherd of the Hills Conservation Center Feasibility Study, renovation of the August A. Busch Memorial Conservation Area Shooting Range and Outdoor Education Center, and Southwest Missouri Quail Ecology Project. A summary of actions taken during the March 6–7 meeting for the benefit and protection of forest, fish, and wildlife, and the citizens who enjoy them includes:

- >> Approved the report of the Regulations Committee, including
 - Amendments to the Wildlife Code to provide clarity on Missouri's pheasant hunting opportunities
 - Adding the goby, an invasive, exotic species of fish to the list of prohibited species
 - Prohibiting the use of big head and silver carp as live bait
- Approved the purchase of 480.49 acres in Montgomery County as an addition to Danville Conservation Area
- **» Approved** the sale of 2.37 acres in Ava in Douglas County.

The next Conservation Commission meeting is April 16 and 17. For more information, visit **mdc.mo.gov/node/3430** or call your regional Conservation office (see Page 3).

The Conservation Department needs experienced anglers from all around the state to help others learn to fish through Discover Nature — Fishing. This free, statewide program provides a series of four lessons to help kids and families gain the skills and confidence needed to become successful anglers. Each of the two-hour lessons is followed by hands-on fishing for participants to put their newly learned skills to work. Equipment and bait are provided. Class size is limited, and classes are offered throughout the fishing season from April through October.

Lesson One covers equipment, casting, and proper fish handling. Lesson Two covers how to rig a fishing pole and bait a hook. Lesson Three covers aquatic biology, ecology, and conservation. Lesson Four covers fishing with artificial lures.

The Conservation Department will provide training for volunteers, who can choose to teach one or more lessons. Experienced anglers who want to pass their skills on to beginners can contact the following Fisheries Division staff for more information on opportunities in their areas. The same contact information works if you want to sign up for classes to learn to fish.

Northwest Region: Eric Dennis at 816-271-3111, ext. 1433, or Eric.Dennis@mdc.mo.gov

Northeast Region: Travis Moore at 573-248-2530, ext. 6385, or Travis.Moore@mdc.mo.gov

Kansas City Region: Bob Mattucks at 816-525-0300, ext. 1241, or Bob.Mattucks@mdc.mo.gov

Central Region: Brian McKeage at 573-815-7901, ext. 3397, or Brian.McKeage@mdc.mo.gov

St. Louis Region: Denise Otto at 573-468-3335, ext. 6603, or *Denise.Otto@mdc.mo.gov*

Southwest Region: Dave Woods at 417-895-6881, ext. 1623, or Dave.Woods@mdc.mo.gov

Ozark Region: Mary Scott at 417-255-9561, ext. 276, or Mary. Scott@mdc.mo.gov

Southeast Region: Salvador Mondragon at 573-290-5858, ext. 4433, or

Salvador.Mondragon@mdc.mo.gov

For more information on the Conservation De
rtment's Discover Nature — Fishing Program

partment's Discover Nature — Fishing Program, go online to *mdc.mo.gov/node/27175*.

NEWS & EVENTS

(continued from Page 7)

Share the Harvest Tops 3 Million Pounds

Deer hunters donated 227,358 pounds of venison from the 2013 Missouri deer harvest to the state's Share the Harvest program. The program is administered by the Conservation Federation of Missouri and the Conservation Department to help feed hungry Missourians. Share the Harvest

orchestrates the efforts of thousands of hunters, local supporting organizations, and more than 100 participating meat processors to get ground venison to people in need through food banks and food pantries. Hunters donate venison, and participating meat processors prepare the meat. Local food banks and food pantries distribute the meat to those in need. Processing fees are covered entirely or in part by local program

sponsors and by statewide sponsors that include the Conservation Department, Shelter Insurance, Bass Pro Shops, the Conservation Federation of Missouri, Missouri Chapter Whitetails Unlimited, Missouri Chapter Safari Club International, Missouri Chapter National Wild Turkey Federation, Midway USA Inc., Missouri Deer Hunters Association, and the Missouri Food Banks Association.

Since the program started in 1992, Share the Harvest has provided more than 3.1 million pounds of lean, healthy venison to help feed Missourians in need. For more information, visit mdc.mo.gov/node/2544.



The Conservation Department and Bass Pro Shops were among sponsors of the first North American Whitetail Summit at Big Cedar Lodge March 3 through 6.

The Quality Deer Management Association with headquarters in Bogart, Ga., organized the meeting with assistance from groups ranging from the U.S. Fish and Wildlife Service and USDA Forest Service to the Archery Trade Association, the National Shooting Sports Foundation, the Pope and Young Club, and several outdoor equipment manufacturers and retailers. The state wildlife agencies of Florida, Georgia, Louisiana, Texas, and Virginia also contributed and sent representatives to the event.

The summit brought together nearly 200 people from the United States and Canada, representing six distinct groups: state and provincial government agencies, hunters, nongovernmental organizations (NGOs), timber companies and other landowners/managers, universities and deer researchers, and manufacturers, retailers and others in the hunting industry.

The summit's primary goals were to identify the most pressing challenges and opportunities facing white-tailed deer management, develop strategies to address them, and bring the combined energy and resources of summit participants to bear on pressing issues.

Conservation Department staff facilitated break-out meetings where hunters, academics, industry, landowners, government agencies, and NGOs decided what issues were most important to them and brainstormed ways to tackle those issues. After these small-group meetings, the six



WHAT IS IT?

Niangua Darter | *Etheostoma nianguae*

The Niangua darter grows to about 3–4 inches long as an adult. Breeding males are brilliantly colored, with an orange-red belly and a series of iridescent blue-green bars along their sides. This fish probes for food in crevices between rocks with its long, slender snout, eating mostly nymphs of stoneflies and mayflies. In the first part of April, adults spawn at swift, gravelly riffles where the fast currents keep the substrate free of silt. Males compete with each other for females and for prime spawning territories in these riffles. Darters complete about half of their total growth during their first growing season; they usually only live one or two years, though a few live as many as four.

In Missouri, Niangua darters are classified as endangered. The largest remaining populations in the state are probably in the Niangua and Little Niangua rivers; elsewhere, they are declining or have disappeared. Most of the year they occupy shallow pools and runs that have a slight to moderate current and silt-free, gravelly bottoms. The decline of this species is due to habitat loss from the construction of reservoirs, disruption of stream channels, and runoff from livestock production. — photograph by Jim Rathert

subgroups presented their priorities to the full assembly, and participants rated each issue from least to greatest concern.

More information about the summit and next steps will be available at **qdma.com**. For information about QDMA chapters in Missouri and how to start a chapter, see *qdma.com/directory*.

A series of public meetings this spring and early summer will allow the Missouri Department of Conservation to gather comments and update hunters on deer management plans, including possible changes to hunting seasons and regulations. The Conservation Commission set dates for the 2014-2015 hunting season in December to enable hunters to plan vacation time. However, there is still time for changes to hunting regulations.

Imagine No Trees Slogan Challenge

Without trees ... hammocks would just be blankets on the ground. Without trees ... hide and seek would just be seek. Without trees ... what would we do? Trees are so important to us, it's almost impossible to imagine a world without them. But that's exactly what we want you to do. Finish the phrase "Without trees . . . " and you could win the Missouri Department of Conservation's Trees Work slogan challenge. Get creative, have fun, and send your ideas to treeswork@mdc. mo.gov before April 30. The winning entry will be made into a poster. Any Missouri resident is eligible to enter, and multiple entries are encouraged. Visit treeswork.org for more information, to see previous posters in this series, and for details about prizes.

Boaters: Beware of Hitchhikers

The spread of zebra mussels in Missouri waters could have profound consequences for Show-Me State anglers and boaters. They can damage boat motors and other marine equipment, cloq water intakes, and smother native mussels. They also eat plankton, the same microscopic plants and animals that are the foundation of the food chain for bass, crappie, catfish, and other aquatic animals. Boaters have a critical role to play in preventing ecological damage by this invasive, exotic species. Visit mdc.mo.gov/node/4681 to learn how to avoid spreading these and other dangerous exotics.

DID YOU KNOW?

Missouri is a great place to discover nature.

Morel Mushroom Hunting

Starting in mid-April, mouthwatering morel mushrooms begin popping up on forest floors throughout Missouri. Morel mushrooms are popular because they're easy to identify and delicious to eat. Three species are commonly found in Missouri, so morels will vary in color from gray to tan or yellow, averaging 3-4 inches tall.

If you're a beginner, play it safe. Either tag along with an experienced mushroom hunter or take a good reference book along on the hunt. It's as simple as knowing when and where to look.

» When to find morels:

- The day following a warm rain
- When the average daily temperature climbs into the 50s
- When mayapples bloom
- When big crappie start biting
- When oak leaves are as big as a squirrel's ear
- **Where to find morels:** Best locations to find morels are moist woods. river bottoms, and south-facing slopes early in the season and on northfacing slopes later on. Morels are often found near elm trees — the older the better, and recently dead is the best. Also check near ash, basswood, or cherry trees. Look in old orchards, burned areas, and recently logged areas.
- **» Eating morels:** Make sure you can identify morels before eating them. Get hunting and identification guidance online at *mdc.mo.gov*/ node/3397. The first time you eat morels, don't eat a lot. As with many foods, some people might be allergic. Slice them in half, clean, and soak overnight in salt water. Rinse well and drain at cooking time. Find 17 mouth-watering morel recipes at mdc.mo.gov/node/18921.
- **» Some mushrooms are poisonous:** Know the three most dangerous groups: amanitas, false morels, and a catchall category called little brown mushrooms. Review photos and learn more at mdc.mo.gov/node/5113.
- **» Regulations:** Most public lands allow mushroom collecting for personal consumption (noncommercial purposes) and no permit is required. Collecting is allowed on conservation areas except on the grounds of several conservation nature centers and Department headquarters grounds in Jefferson City (check area rules before you go). Missouri's state parks allow collecting and specify a limit of 2 gallons per person per visit. Mark Twain National Forest allows collecting with no quantity specified.

Watch the Conservation Department's morel mushroom hunting video at mdc.mo.gov/node/10277.

You may purchase Missouri's Wild Mushrooms: A guide to hunting, identifying, and cooking the state's most common mushrooms, by Maxine Stone, for \$14, plus tax and shipping and handling, from the Conservation Department's Nature Shop at *mdcnatureshop.com* or by calling 877-521-8632.

When the weather warms, anglers seek a royal treat in a mess of these fine-eating fish.

BY GREG STONER
PHOTOGRAPHS BY NOPPADOL PAOTHONG



IT SEEMS LIKE MOST SPECIES OF FISH HAVE THEIR OWN FAN CLUBS

Largemouth bass are revered by millions of anglers. Catfish now have magazines and brands of fishing tackle devoted specifically to them. There is even a Gar Anglers' Sporting Society for anglers who pursue those highly underrated fish (no kidding, you can Google it). But in the spring of the year when the waters are warming up and the dogwoods start to bloom, I'd venture to guess that no fish has more fans out there than the crappie.

There are a number of reasons why crappie are so popular in Missouri. They are found in streams, lakes, and ponds statewide, so you don't have to drive half a day to get to a fishable population. They are fairly easy to catch, and you do not need a huge tackle box full of lures, or even a boat, to do so. When the bite is on, the action can be extremely fast. It is not unheard of for a pair of anglers to catch 500-plus crappie on a good weekend. Just remember during all this excitement that depending upon where in Missouri you are fishing, the daily limit is 30 crappie or fewer, and that minimum length limits may apply. Finally, crappie are one of the finesteating fish in freshwater. Deep-fried, baked, or broiled, they are delicious!

Here are some tips and tricks from my 25-plus years of chasing crappie on Lake of the



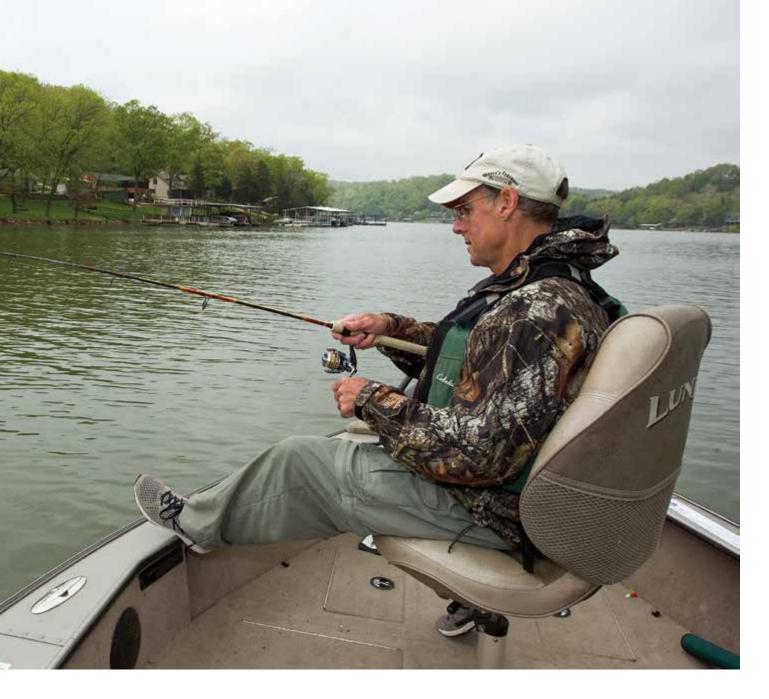
Ozarks, which are applicable wherever crappie are found.

When and Where to Fish

Contrary to popular belief, crappie do continue to feed and can be caught after the spawn is over. Fishing during the spawn is popular and easy



CRAPPIE ARE FOUND IN STREAMS, LAKES, AND PONDS STATEWIDE. YOU DON'T HAVE TO DRIVE HALF A DAY TO GET TO A FISHABLE POPULATION.



Missouri anglers can use the Find MO Fish application for Android and Apple smartphones. This free app shows locations of underwater fish attractors placed by the Conservation Department, so you can guide your boat right up to the structure and start fishing.

since much of the crappie population is piled up in shallow water within a rock's throw of the shoreline, but crappie can be caught throughout the year, even through the ice.

Once you have located a water body that contains crappie, where do you start fishing? In the spring of the year during the spawning



season (late March to early May), it's an easy choice since every limb and log in 1 to 3 feet of water can potentially hold that night's supper. Shallow water can also produce good numbers of crappie in the fall of the year. During the summer and winter, crappie will move offshore into deeper water where they will congregate around submerged brush or other cover. The Conservation Department has placed fish attractors in many of our public lakes and reservoirs. For a complete list with GPS coordinates, go to *mdc.mo.gov/node/10182*. Another tool for Missouri anglers is the Find MO Fish application for Android and Apple smartphones, which can be found at mdc.mo.gov/ node/15421. This app essentially converts your phone into a handheld GPS with the brush pile locations already loaded!

Having two contrasting colors on a jig makes the lure more visible to fish and may be more important than any specific color combination.

Lures

Crappie can be caught on a wide variety of baits including jigs, crankbaits, flies, small spinners, and natural baits such as minnows and night-crawlers. I once caught a 13½-inch crappie on a jug baited for blue catfish with a 3-inch-long chunk of shad on a 9/0 circle hook. Not my go-to technique for crappie, but it did happen. Most crappie are caught on either minnows under a bobber or on small ½2- to ¼-ounce





Crappie can be caught on a wide variety of baits including jigs, crankbaits, flies, small spinners, and natural baits such as minnows and nightcrawlers.

jigs, with 1/16-ounce being the most versatile. On very windy days, or when fishing in fast or deep water, you may need to use the larger jigs. When the fish just don't seem to want to bite, try using a smaller, lighter jig. In large part, jig color is a matter of personal preference. I've come to the realization that most of those color combinations out there are for us, not the fish. If you talk to 10 crappie anglers you'll likely get 10 different "best" jig colors to use. I'll throw any color as long as it is red and chartreuse, except on those days when I just go wild and tie on a "smoke with red flake" or "blue and white." I do believe that having two contrasting colors on a jig, like black and chartreuse or blue and white, makes the lure more visible to the fish and may be more important than any specific color combination.

For years there have been a number of products on the market, in the form of small pellets, which are scented to attract game fish including crappie. These are not always necessary, but I have noticed that they do seem to increase the number of bites you get on some days. I've also noticed that bluegill like them, too, and that they are very adept at stealing them off of your hook. By inserting these pellets into a syringe (minus the needle) you can inject them inside the commonly used crappie tube jigs. Protected from bluegill, they will slowly dissolve, leaving a scent trail for the crappie.



Lure Presentation

Crappie will typically not chase down a lure that goes screaming by them at high speed. Watch any accomplished crappie angler and you will generally see them using a slow, steady retrieve, bumping their bait into any available cover. At times when the crappie are not willing to bite on even the slowest retrieve, vertical jigging can be the most productive technique.

To vertical jig, just drop your lure down to a given depth (for example, right above a brush pile) and either hold it steady or slowly pump it up and down a few inches. Crappie often hang out in loose-knit schools at a specific depth. When you hook a crappie, count the number of times you turn the reel handle to get the fish to the surface. On your next cast, turn off the antireverse (on a spinning reel) and lower your lure that same number of cranks. Then, put a small rubber band around the spool of your reel to keep additional line from coming off. This will keep you fishing at the same depth and, unless they move on you, right in the middle of the crappie school. Another good way to keep your bait at a specific depth is to suspend it under a small slip bobber. Since this rig can be cast, it also allows you to vertically fish a distance from the boat or shore and reduces the chances of spooking the fish in shallow water.

Although a big crappie will occasionally try to yank the rod out of your hands, they are known as notoriously light biters. Keep a close watch on the line between the tip of your rod and where it enters the water. By watching for a slight twitch, or for slack to develop in your line, which will not happen unless something is messing with your lure, you will detect many crappie strikes

MANAGING FOR CRAPPIE

Across the state, crappie populations are managed under a variety of size and creel limits depending upon biological characteristics of that fishery and local fishing pressure. At Truman Lake and Lake of the Ozarks, a 9-inch minimum size limit went into effect in 1989. Since that time, densities of crappie have declined while growth rates have increased in these reservoirs. In recent years, a growing number of anglers have expressed a desire for the Conservation Department to consider going to a 10-inch minimum length limit on these reservoirs, stating that there is not enough meat on a 9-inch crappie to justify harvesting it (on average, the fillets from a 10-inch crappie weigh 44 percent more than those from a 9-inch fish). Biologists on both reservoirs are taking a close look at crappie growth and mortality to determine how an increase in the length limits would affect both the crappie population and angler harvest.



Although a big crappie will occasionally try to yank the rod out of your hands, they are known as notoriously light biters.

that you cannot feel through the rod. It will take some time, practice, and a few lost jigs to learn the difference between the feel of your lure bumping into a limb versus a light crappie bite, but eventually you will catch on. A good rule of thumb is: When in doubt, set the hook.

Fishing Line

Four- to 6-pound line is sufficient for crappie. There are basically two types of line available, braided or "superlines," and various formulations of monofilament. Both have their place in crappie fishing. Superlines have little-to-no stretch, which makes them very good for detecting light bites, especially in deep water. They also have very little "memory," meaning that the line does not come off the spool looking like a stretched-out slinky. Line with lots of memory (like monofilament in subfreezing weather) can make detecting light crappie bites very difficult. Six-pound superline is strong enough to straighten the hook on a crappie jig hung in the brush, saving you tackle and time spent tying on another jig when you should be fishing. Also, when that 20-pound flathead catfish or 5-pound walleye grabs your crappie jig, you might actually land him. However, monofilament tends to be less visible in the water than superlines, which can be important if you are fishing in very clear water. A common situation where monofilament will out-fish superline is when the crappie are hesitant to

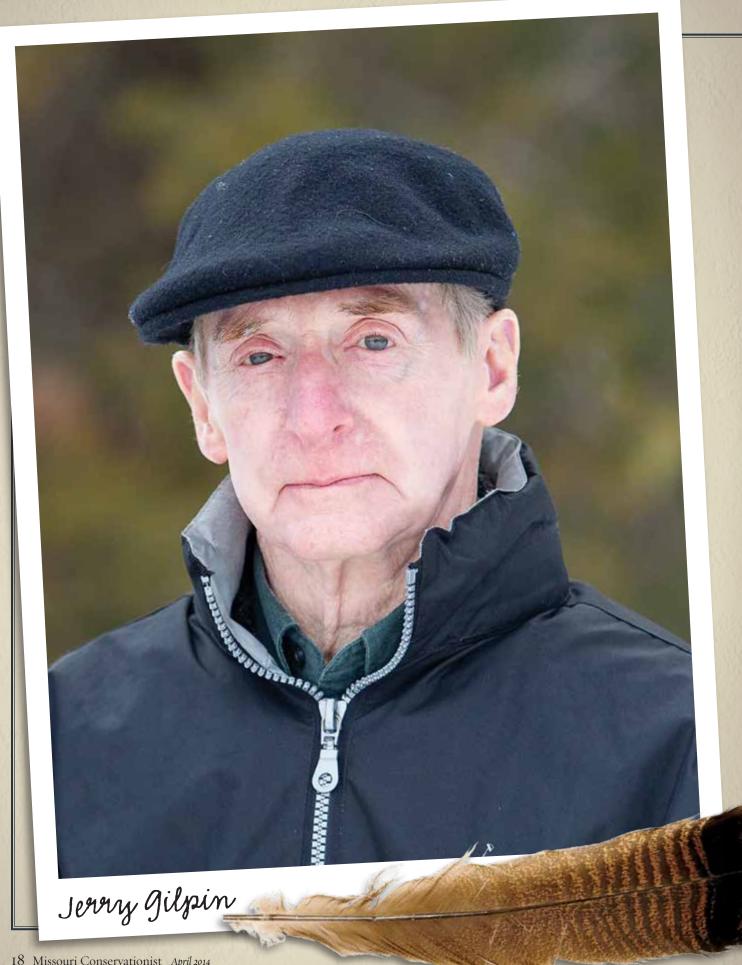


hold onto your bait. Monofilament has enough stretch to it that the crappie may not detect you on the other end of the line as quickly, giving you more time to set the hook.

In summary, crappie can be pursued with a minimal amount of gear. A couple of light spinning rods (one strung with monofilament and one with superline), a handful of 1/32- to 1/4-ounce jigs, two or three colors of tube jig bodies, a couple small bobbers, and you're good to go. Vary the depth and the speed of your retrieves from slow to slower, and experiment with different jig colors. Let the fish tell you what they want that's really what fishing is all about.

Greg Stoner has been the Department's fisheries management biologist at Lake of the Ozarks since 1991. Greg and his family live on the Niangua Arm of Lake of the Ozarks.

Crappie are fairly easy to catch, and you do not need a huge tackle box full of lures, or even a boat, to do so.



Blind faith and the spring turkey season opener

Turkey for Jery

THE ROAR of Jerry Gilpin's old 12-gauge pump shotgun jolted me out of my daydreaming. I turned and saw a fallen turkey just a few yards from our decoys. A couple of hens were hot-footing it across the only opening I had in the trees. Right behind them, a big gobbler was closing the distance to the nearby woods.

I brought my Browning Sweet Sixteen shotgun up and swung the bead along with his trotting head. Just a few yards from the thick oaks ringing the field, I found my shot.

I was dumbfounded by our good fortune. It was only an hour and a half into the first day of spring turkey season and we already had two nice gobblers on the ground.

Nothing to It

I got up from behind a blown-down oak and started into the field. I could see Jerry, grinning hugely, approaching his bird. We did a whoop-and-holler dance — our two gobblers had fallen only 7 yards apart. I glanced at my watch. It was 8 a.m. sharp. Nothing to it!

"That was really cool!" Jerry kept repeating to me, as if I didn't fully understand what had just happened. We collected our decoys and admired our birds side by side. They were nearly identical mature

gobblers with nice beards and spurs. As I poured us each a cup of hot coffee, Jerry called his wife to tell her about his first turkey hunt.

"Yeah, we both got one," he told her. "I shot mine, and then Don got one a few seconds later." He made it sound so easy, like it worked out just as he had expected.

I didn't want to dampen his euphoria, but I explained to Jerry just how unusual this was, and how fortunate we were to both get gobblers. His look told me this was pretty much the way he thought it

BY DON LAFERLA | PHOTOGRAPHS BY DAVID STONNER

would play out — maybe with only one turkey instead of two — but he had been confident in our success all along.

An Unlikely Mentor

This unusual hunt was the result of months of planning. One afternoon, back in the dead of winter, my wife, Gloria, casually mentioned that our friend, Kathy, had asked if I would consider taking her husband, Jerry, on his first turkey hunt.

"You wouldn't mind taking Jerry turkey hunting with you, would you?" she asked, though it was more of a statement than a question, and mere formality. I could tell I was committed.

I told her that I would just have to clear it with my friend Bob who owned the 80-acre "gentleman's farm" where I hunted, but all I could think was, with a record like mine, I had no place teaching someone else to hunt.

Nothing to Lose

A few days later, I saw Bob, the landowner, and asked him if Jerry could hunt with me on his farm. Bob enthusiastically agreed, he probably assumed the wild turkeys on his farm were just as safe with the two of us hunting as they were with me alone, anyway. He knew that I hadn't fired a shot in my past three years hunting on his farm. For Jerry's sake, I hoped to prove him wrong this time.

Jerry, the rookie turkey hunter, is an amazing guy, and I didn't want to let him down. A military veteran and, more recently, a colon-cancer survivor, he has endured some hard times. Yet Jerry and Kathy always had smiles on their faces and words of encouragement for everyone else. They remained active in their church and commu-

nity and supported others despite their own difficulties. I wanted to give a little something back to them.

Like a Kid at Christmas

Every time I saw Jerry after I told him we were going to hunt together, he was like a kid who couldn't wait for Christmas morning. He was excited to be going on his first turkey hunt and to be carrying his beautiful old, hand-engraved Ithaca shotgun; it was a family heirloom they had sold during his illness. His wife had bought it back as a surprise gift for him.

His excitement began to have a draining effect on me. I was getting worried about how Jerry would feel if we didn't even see a turkey, let alone bag one. It was a lot of responsibility.

As spring drew nearer, I took every opportunity to try to keep Jerry's optimism in check. I told him about my record with turkeys, and that he shouldn't expect too much. I told him we would enjoy some beautiful spring mornings. I told him we'd see some deer and plenty of other wildlife. I told him it would be great just to be out there.

Regardless of what I said, it was like Jerry hadn't heard a word I was saying. He had his mind fixed that I was going to put him in front of a big gobbler. End of story.

What could I do? How could I make this turn out for him?

Preparing for Spring

I decided to do everything I could to improve our chance for success. I went to our local sporting goods store and bought a set of turkey decoys that said on the box they were "almost guaranteed" to bring turkeys running. The pictures on the box looked very convincing. I also purchased a new, full set of camouflage — pants, shirts, vest, and head net — the works. I tried it all on at home and looked like a walking brush pile. My wife and grand-daughter took one look at me and burst out laughing. What did they know, I thought, they're not turkeys.

I added up the costs of my new turkey hunter duds, decoys, and tags. I calculated the break-even point of my



Missouri offers some of the best turkey hunting in the nation. The Conservation Department provides extensive turkey hunting information online, including seasons, regulations, methods, and tagging information, at mdc.mo.gov/node/72.



shopping trip to be approximately nine turkeys. Not too bad, I thought, though one would still be a stretch.

A week or so before opening day, I drove Jerry out to the farm where we were going to hunt. I wanted him to see the layout and prepare a couple of locations to set up on opening morning. We agreed on two locations, both mowed fields surrounded by heavy timber and brush. The landowner told us he had seen a few turkeys around these areas in the afternoons. Not for long, I thought. They will be heading for the neighboring farms soon enough.

Opening Day

I picked up Jerry at 5:45 a.m. on opening morning. It was less than a 15-minute drive to the farm, and it was just starting to lighten up. We quickly finished off our coffee, picked up our decoys and guns, and headed to the first field, which was only a few hundred yards away.

We set up the decoys so that any turkeys crossing the lane into the woods would spot them. The decoys would really stand out in the morning sunlight as they slowly rotated on their stakes.

Jerry sat at the base of a thorn tree along a fencerow that divided two fields. He would have an almost 360-degree view. The decoy spread was about 25 yards to his right — halfway to the woods. I settled into an oak tree rootwad nearby.

I told Jerry he was our designated shooter. He would be in the best position to see any turkeys approaching, so I expected him to take care of business if I could call them in.

I got my head net on and looked at my watch, 6:30 a.m.

Perfect. A few minutes later, scattered shots rang out from across the river. Aha, I thought, the turkeys were already fleeing to the other farms.

Stubborn Turkeys

I worked the cedar box call every few minutes, just like I heard them do on the Outdoor Channel. Why don't they gobble back? I wondered. Maybe these turkeys are mute ... maybe they are all hens ... but I continued to call anyway.

From where I was sitting, I really couldn't see much except for the small lane beside me leading into the field. Any turkeys I might see would be within a few yards. I wasn't expecting to shoot anyway, though. That was Jerry's job.

By 7:30 a.m., not a thing was happening. No more shots across the river, nothing. Boredom was setting in. I imagined turkeys walking down the lane toward me, but they never materialized.

The author and Jerry Gilpin had a successful first hunt together.

Turkey Time, Times Two

I glanced at my watch, and it was almost 8 a.m. I stroked the box call a few times and sat waiting for a turkey to appear. That's when I heard Jerry's shotgun boom. I spun around to see his turkey on the ground. Then, another popped up and it was my turn. He dropped quickly, too. I couldn't believe our luck. We had done what I never even thought possible — harvested two gobblers out of one group in a span of a few seconds.

Kathy came out to our house as Jerry and I proudly displayed our gobblers for the cameras. We celebrated with hugs and a lot of congratulations. With Jerry's help, we cleaned and prepared both birds for the freezer. Soon, we had a wild-turkey dinner planned with Bob and his wife to celebrate.

What started out with not much more than blind faith had turned into an unforgettable morning. As I gazed at Jerry, still sporting his gigantic grin, it dawned on me that perhaps I had the teacher and student thing all backward. It was Jerry who showed me that blind faith can be a powerful thing, indeed, especially on a spring opener.

Don LaFerla is a retired corporate executive and an avid outdoorsman. He lives in Carthage, Mo.





from the City of St. Louis Parks Department to erect a martin house in Forest Park, and eight pairs took up summer residence. Now there are purple martin houses on six poles located throughout the park. »

"The colony has grown to about 65 pairs per season now, probably one of the largest colonies of martins in an urban park in North America," says Miller.

Purple martins arrive in Missouri from March through May. The first arrivals are older male birds that defend potential nesting sites until they are paired with a female. The females arrive a few weeks after the males, with pairing occurring in May. After rearing their young, they begin southward migration early, with most departing by late August.

Purple martins throughout eastern North America mostly nest in human-provided housing or in man-made structures such as highway lights. Native Americans strung racks of nesting gourds to attract purple martins. Settlers in colonial America constructed large multicompartment houses placed on poles and rooftop cupolas.

Proper placement of martin houses is vital. For purple martins, protection from predators is important. They seek open, treeless areas where they can avoid aerial predators. They forage for flying insects nearby over water and grasslands.

In addition to installing, cleaning, repairing, and improving martin houses at Forest Park, Miller monitors nest boxes to ensure they are not used by other species, and he provides supplemental feed during cold snaps and shade during summer heat waves.

Local volunteers help with nest monitoring, and staff from Probstein Golf Course and Forest Park Forever, a nonprofit organization dedicated to maintaining the St. Louis landmark, assist with maintenance chores throughout the season. Miller also speaks to the park's bird-walk group at least once during the summer season and explains how he monitors the nest boxes.

Miller was instrumental in securing funding from Forest Park Forever, Probstein Golf Course, and local residents for the project. He also selected the birdhouse sites throughout the park and oversaw all of the installations. Miller was given a 2014 Keeper of the Park Award by Forest Park Forever for his efforts with purple martins.

The conservation efforts at Forest Park have forged new partnerships that will improve purple martin habitat for years to come.

"The purple martin is a flagship species. Everyone's grandparents and great-grandparents watched out for these birds," says Brad Jacobs, Conservation Department ornithologist. "This is a great example of citizen-led conservation truly making a difference."

If the long-held tradition of providing housing for purple martins ceased, the martin population would crash, especially in areas where natural cavities are in short supply.



"This figures into why I personally encourage people to monitor boxes and protect nests from predators," says Miller. "Some martin hobbyists erect housing and let the birds do the rest. A little protection can help the martins raise their broods."

"It connects us to something much bigger than our backyards," says Miller, "essentially to the amazing biology of the entire planet."

David Stonner has been a photographer for the Missouri Department of Conservation for seven years. In his free time, he enjoys exploring Ozark streams and trails with his family.





Park volunteer John Miller's passion is maintaining the homes of the growing population of martins that return to Forest Park each year to raise their young.

The first martins leave South America in late December and migrate north through Central America, reaching the coast of the southern United States in mid-January. Martins stay along the coast until the March warm-ups draw them northward to Missouri and Canada. A martin can fly the 600 miles from the Gulf Coast to Missouri in less than two days.



This purple martin housing unit has been well placed and is surrounded by open flyways and few trees. Trees would obstruct the martin's flight path and would also give the element of surprise to predators, such as hawks.



In addition to installing, cleaning, repairing, and improving martin houses at Forest Park, Miller monitors nest boxes to ensure they are not used by other species, and he provides supplemental feed during cold snaps and shade during summer heat waves.

How To Become A Purple Martin "Landlord"

Potential purple martin landlords need to select the right location. Adequate open space is essential, and the housing should be placed in proximity to human activity, generally no further than about 100 to 200 feet from a building.

The most important element is having open flyways on at least two, and preferably three, sides of the housing unit. Martins like to approach their housing like airplanes, not helicopters, says Miller. Often people erect gourds or martin houses in a yard they assume is open enough, but if it is ringed by woods some distance back on three sides it is not likely to attract the birds. A few scattered trees may not pose a problem, but martins like unobstructed flyways.

An interested hobbyist probably should not erect housing without planning and committing to care for it. It might attract a pair or two of martins, but likely will never host a thriving colony of martins.

Purple martin nest boxes or gourds may not be successful if lots of house sparrows are present in the area.

Martins also sometimes suffer from wet nests, infestations of mites, predation from rat snakes or raccoons, owls, and Cooper's hawks and will subsequently abandon a location.



Cooper's and sharp-shinned hawks can out-fly martins and capture them more easily when they are among trees. In the open, the agile martins have a fair chance for survival. Owls, raccoons, opossums, snakes, as well as excessive summer rains, can wreak havoc on a colony. Martins may not return the following season because surviving adults usually abandon locations where they don't have successful broods.

The female martin lays two to seven pure-white eggs at a rate of one egg per day. The female incubates the clutch for approximately 15 days, then the young hatch. The parents both feed the young until the young fledge, or fly from the nest. Usually only one brood is raised each season.





The young continue to be dependent on their parents for food and training for an additional one to two weeks after fledging. Martins fledge when they are about 26–32 days old.



A biologist places a small, numbered metal band on the leg of a young bird before it fledges. The band allows the bird to be identified in the future.



Learn More About Purple Martins

- **»** Download the Conservation Department's purple martins brochure at *mdc.mo.gov/node/9778*. Or request your free copy by calling toll free 877-521-8632.
- The book Birds in Missouri, by Brad Jacobs, is available from the Conservation Department's Nature Shop (\$30 plus shipping) by calling toll free 877-521-8632 or by ordering online at mdcnatureshop.com.
- >> Visit the Purple Martin Conservation Association online at *purplemartin.org*.
- >> Learn more about the Conservation Department's full life-cycle bird conservation efforts at *mdc.mo.gov/node/23145*.



Banding studies show that successful adults return to raise more broods for many years. The adults may have different mates each year, but successful pairs usually return to the same area. About 10 percent of the yearling birds will return the next spring to their birth site with most individuals settling within a 100 miles.



Eastern Bluebird

I SOMETIMES REFER to our farm in Franklin County as "Bluebird Central" because we see so many of these colorful little thrushes year-round on a daily basis. Our setting is perfect for bluebirds, perched high on a hilltop and surrounded by hayfields, prairies, and brushy fencerows lined with cedar trees. The tiny blue-cedar cones, which I call cedar berries, provide abundant food for wintering bluebirds, and our yard is a great source of insects for the bluebirds of spring.

Although eastern bluebirds (Sialia sialis) are quite social in winter (see inset photo below) they can be very territorial during nesting season in early spring. I was never more aware of this than last spring when I walked out the door one sunny morning. I actually heard the chatters of distress before I spotted two bluebirds on the north side of our yard beneath an aging sugar maple. At first I could only see a bluish blur, bouncing along the lawn, so it took me a second to make out two female bluebirds in a fierce squabble. Seeing a great photo opportunity, I raced back into the house and grabbed my camera. Unfortunately, it was attached to my longest lens, a 500mm, and my tripod was nowhere to be found.

I returned to the yard with the awkward photo rig and was surprised to find the female bluebirds still going at it, now about 50 feet from the maple tree. I dropped to the prone position and focused on the birds with the big lens. As I dialed in the action from about 50 feet away I realized the squabble had taken a turn for the worse. The dominant bird had pinned down the weaker bird and was pecking at its neck and chest. After capturing a few frames, I fully expected the birds to disperse, but the altercation continued. Finally, contrary to my training as a biologist, I decided to intervene.

As I started toward the birds I expected them to take flight, but the pecking persisted, and I feared the lesser bird a goner. When I actually reached the battleground, my shadow hanging over both birds, I looked down and shouted, "Hey — that's enough!" and received no response. I finally put my foot down, literally, and gently nudged the attacker off of the defeated bluebird. I stepped back and watched in awe as the bottom bird regained its senses and took flight, apparently none the worse for wear, the victor close on its tail.

As each bird lighted in a different tree, I was happy to see that the fight was over, for a while at least. I headed off to work, eager to describe my ob-

servations to my colleagues. Along the way, I was reminded of how important it is to space your bluebird houses a generous distance away from each other. I'd learned firsthand just how ornery Missouri's state bird could be.

-Story and photograph by Danny Brown (main) 500mm lens • f/4.0 • 1/640 sec • ISO 200 (inset) 200mm lens • f/5.6 • 1/125 sec • ISO 200

> We help people discover nature through our online field guide. Visit mdc.mo.gov/node/73 to learn more about Missouri's plants and animals.







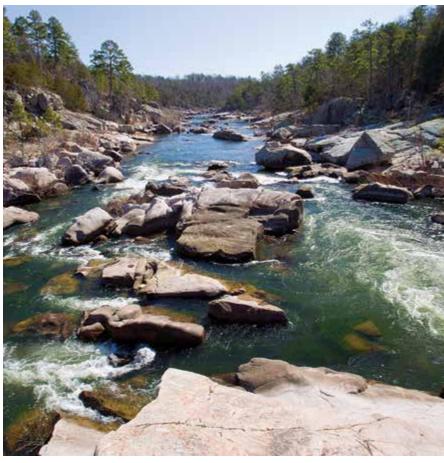
Millstream Gardens Conservation Area

Fields, bottomland forest, woodlands, and river views make this Madison County area a diamond in the rough of mining country.

THIS 916-ACRE conservation area consists of open fields and pine and oak woodlands and has an interesting history. Prior to 1979, the area was a privately owned tourist destination, with replica pioneer villages and acres of planted flower gardens. While a few of these domesticated flowers can still be found today, most have been replaced with native wildflowers such as wild sweet williams, purple coneflowers, daisies, blazing stars, and buttercups. These native flowers can be seen blooming in the spring and summer along roads and the four hiking trails found on the area.

Due to ancient volcanic activity, large granite boulders and outcrops can be found throughout the forest. The St. Francis River, which cuts through the middle of the area, has granite shut-ins narrow corridors of rock that the river is forced through. The shut-ins form fast-moving chutes and rapids when the water level is high, especially after a rain. These rapids are a favorite destination for kayak enthusiasts. The Missouri Whitewater Association holds its annual kayak races here during the third weekend in March. Part of the river and its wooded corridors are also designated as the St. Francis River Natural Area because of the unique geology and aquatic habitat that are home to several species of mussels.

The area north of the river has a lot of recreational activities to offer. Hiking along the river bluffs, one can enjoy several scenic vistas. The paved disabled-accessible Turkey Creek Trail winds through the forest and ends at a scenic overlook of the river. A picnic pavilion also overlooks the shut-ins and is near a unique tree. This tree, known



16-35mm lens • f/7.1 • 1/50 sec • ISO 100 | by David Stonner

as the curly tree by locals, is a shortleaf pine with a donut-like curl in the middle of the trunk.

The area south of the river, accessible from State Highway D, is a great place to see wildlife management at work. Bottomland forests, sunny woodlands, and fields of native grasses can be found here, along with food plots and brush piles. A portion of this area was once completely barren from years of overgrazing by hogs. Thanks to conservation planning and land management, this area is now a thriving field of native grasses and forbs. Hunting and wildlife viewing are also especially popular on the southern portion of the area.

Millstream Gardens Conservation Area is located along Highway 72 between Fredericktown and Arcadia.

—Becky Fletcher, area manager



Recreation opportunities: Hiking, kayaking, fishing, hunting in season, wildlife viewing, picnicking, archery, and bird watching

Unique features: Granite rock shut-ins on the St. Francis River and a detached river slough that is home to several fish and aquatic insects

For More Information Call 573-290-5730 or visit mdc.mo.gov/a8210.



To find more events near you, call your regional office (see Page 3), or visit *mdc.mo.gov* and choose your region.

WETLANDS FOR KIDS

APRIL 5 • SATURDAY • 10 A.M.-3 P.M.

St. Louis Region, August A. Busch Memorial Conservation Area 2360 Hwy. D, St. Charles, MO 63304 No registration

All ages

See live birds of prey, create wetland artwork, explore a beaver lodge, practice air rifle and archery skills, view live snakes and turtles, or watch retriever dogs in action. Visit more than 15 stations to learn about nature.

HERITAGE DAY

APRIL 12 • SATURDAY • 10 A.M.-2 P.M.

Ozark Region, Twin Pines Conservation Education Center, Route 1, Winona, MO 65588 No registration

All ages

Learn about life in the Missouri Ozarks during the late 1800s and early 1900s. Attend demonstrations and workshops, including soap making, rug making, spinning, weaving, and more. Enjoy live music and a fish fry from 11 a.m.—1 p.m., or while supplies last.

NATURESCAPING AND RAIN GARDEN EVENT

APRIL 19 · SATURDAY · 9 A.M.-NOON

Southwest Region, Wildcat Glades Conservation and Audubon Center, 201 W. Riviera Drive, Suite B, Joplin, MO 64804 Registration required, call 417-629-3423 Ages 14 and older

Learn about including native plantings in your landscape, how to install a rain garden, what plants to select, and how they benefit wildlife. Handouts and native plants will be available.

PADDLEFISH SNAGGING CLINIC

APRIL 19 • SATURDAY • 8–10 A.M.

OR 10 A.M.-NOON

Kansas City Region, Warsaw Community Building, 181 West Harrison, Warsaw, MO 65355 Registration required, call 660-530-5500 All ages

This program will cover fish biology, tackle, fishing techniques, and cleaning. Lessons will be followed by a mentored snagging excursion on the Lake of the Ozarks. Two sessions available. Lunch will be provided.



WILDHEART IN CONCERT

APRIL 25 • FRIDAY • 7-8 P.M.

Southeast Region, Cape Girardeau Conservation Nature Center, 2289 County Park Dr., Cape Girardeau, MO 63701 No registration required

All ages

Bring a blanket or lawn chair and enjoy the original music and groovy actions of WildHeart. Held inside if there is inclement weather.

CONSERVATION CELEBRATION

APRIL 26 • SATURDAY • 10 A.M.-NOON

Northeast Region, Conservation
Department Northeast Regional Office,
3500 S. Baltimore, Kirksville, MO 63501
Registration required by April 25,
call Amanda Moore at 660-785-2420
All ages

Activities, demonstrations, and displays to help your family discover nature. Learn about recycling while making paper or play a game to explore the relationship between trees, water, and soil. Create tree cookie necklaces, watch forester demonstrations, and more!

DISCOVER NATURE — WOMEN: DABBLERS AND DIVERS

APRIL 29 • TUESDAY • 9 A.M.-4 P.M.

Central Region, Runge Conservation Nature Center, 330 Commerce Drive, Jefferson City, MO 65102 and Eagle Bluffs Conservation Area, 6700 W Route K, Columbia, MO 65203 No registration

Women ages 18 and older

Meet at Runge Conservation Nature Center for a short presentation and then carpool to Eagle Bluffs Conservation Area to identify waterfowl. Bring lunch or money to eat at a local cafe, plus binoculars. Spotting scopes and some binoculars provided. Please dress for the weather.

DISCOVER NATURE PHOTO CONTEST

Show the world your idea of discovering nature in Missouri. Using your Google+, Instagram, or Twitter account, tag your Missouri nature photos with "#MDCdiscovernature." Your photos will appear on our website at *mdc.mo.gov/node/26255*, where you can also read the contest rules. Every month, Department staff will select and post a winning photo. We'll publish all of the monthly winners in the January 2015 issue of the *Conservationist*.



Subscribe online • mdc.mo.gov/node/9087 • Free to Missouri households



I Am Conservation

Kevin Yaeger is passionate about introducing anglers to the sport of paddlefish snagging. He grew up near Fayette, and he learned to fish from his parents on the family farm. "We spent many Sunday afternoons fishing in ponds for bass and catfish," said Yeager. Yaeger spends a lot of time in search of paddlefish, also known as spoonbill, throughout the month of April. Whenever possible, he includes friends who have never tried it before. "It's a very social sport. I really enjoy snagging because you are in the boat with a group of buddies for the day. Then we go back home and have a big fish fry that night." Yaeger is also quick to bring kids into the sport, having helped many youngsters to earn the Conservation Department's Master Angler Award for catching paddlefish over 50 pounds. His daughter Jaclyn holds the family record at 84 pounds. Paddlefish are shark-like in shape, with a long nose and toothless mouth and can grow up to 7 feet long and weigh 160 pounds. The paddlefish, Missouri's official state aquatic animal, is one of the most ancient fish species alive today. "There is a thrill to catching a very large fish that looks like a dinosaur. The Conservation Department has created the best spoonbill fishery in the world, and I plan to enjoy it every year," said Yaeger. —photograph by David Stonner